

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

SECOND AMENDMENT

BILL NO. 2002-106

ORDINANCE NO. 5526

AN ORDINANCE TO ADOPT THE 2000 EDITION OF THE UNIFORM PLUMBING CODE, TOGETHER WITH AMENDMENTS THERETO, AND TO PROVIDE FOR OTHER RELATED MATTERS.

Proposed by: Paul K. Wilkins,
Director of Building and Safety

Summary: Adopts the 2000 Edition of the Uniform Plumbing Code, together with amendments thereto, as the City's Plumbing Code.

THE CITY COUNCIL OF THE CITY OF LAS VEGAS DOES HEREBY ORDAIN
AS FOLLOWS:

SECTION 1: Title 16, Chapter 28, Section 10, of the Municipal Code of the City of Las Vegas, Nevada, 1983 Edition, is hereby amended to read as follows:

16.28.010: Those certain documents, three copies of each being on file in the Office of the City Clerk, and designated as follows, are adopted by reference and made a part of this Code, to the same effect as if set out herein in full:

(A) Uniform Plumbing Code, [1997] 2000 Edition, including its Standards and Appendices, except as otherwise indicated, designated as Part 1 of this Chapter;

(B) A document entitled ["1997 Southern Nevada Plumbing Code Amendments, as modified herein,"] "Southern Nevada 2000 Plumbing Code Amendments," adding to, deleting from and amending the Uniform Plumbing Code, [1997] 2000 Edition, designated as Part 2 of this Chapter.

SECTION 2: Section 313.5 of the Uniform Plumbing Code, 2000 Edition, is amended by adding thereto a new sentence, reading as follows:

All copper water piping under the slab must be sleeved.

SECTION 3: The Uniform Plumbing Code, 1997 Edition, and the 1997 Southern Nevada Plumbing Code Amendments are hereby repealed in their entirety.

SECTION 4: If any section, subsection, subdivision, paragraph, sentence, clause or phrase in this ordinance or any part thereof, is for any reason held to be unconstitutional, or invalid or ineffective by any court of competent jurisdiction, such decision shall not affect the validity or



032458

1 effectiveness of the remaining portions of this ordinance or any part thereof. The City Council of the
2 City of Las Vegas hereby declares that it would have passed each section, subsection, subdivision,
3 paragraph, sentence, clause or phrase thereof irrespective of the fact that any one or more sections,
4 subsections, subdivisions, paragraphs, sentences, clauses or phrases be declared unconstitutional,
5 invalid or ineffective.

6 SECTION 5: Whenever in this ordinance any act is prohibited or is made or declared
7 to be unlawful or an offense or a misdemeanor, or whenever in this ordinance the doing of any act is
8 required or the failure to do any act is made or declared to be unlawful or an offense or a
9 misdemeanor, the doing of such prohibited act or the failure to do any such required act shall
10 constitute a misdemeanor and upon conviction thereof, shall be punished by a fine of not more than
11 \$1,000.00 or by imprisonment for a term of not more than six months, or by any combination of such
12 fine and imprisonment. Any day of any violation of this ordinance shall constitute a separate offense.

13 SECTION 6: All ordinances or parts of ordinances or sections, subsections, phrases,
14 sentences, clauses or paragraphs contained in the Municipal Code of the City of Las Vegas, Nevada,
15 1983 Edition, in conflict herewith are hereby repealed.

16 PASSED, ADOPTED and APPROVED this 6th day of November, 2002.

17 APPROVED:

18 By 
19 OSCAR B. GOODMAN, Mayor

20 ATTEST:

21 
22 BARBARA JO RONEMUS, City Clerk

23 APPROVED AS TO FORM:

24 Val Steed 11-6-02
25 Date

1 The above and foregoing ordinance was first proposed and read by title to the City Council on the
2 2nd day of October, 2002, and referred to a committee for recommendation; thereafter the
3 committee reported favorably on said ordinance on the 6th day of November, 2002, which was a
4 regular meeting of said Council; that at said regular meeting, the proposed ordinance was read by
5 title to the City Council as amended and adopted by the following vote:

6 VOTING "AYE": Mayor Goodman, Councilmembers Reese, M. McDonald, Brown, Weekly
and Mack

7 VOTING "NAY": None

8 EXCUSED: L. B. McDonald

9 ABSTAINED: None

10 APPROVED:

11 
12 _____
OSCAR B. GOODMAN, Mayor

13 ATTEST:

14 
15 _____
BARBARA JO RONEMUS, City Clerk

**SOUTHERN NEVADA 2000
PLUMBING CODE AMENDMENTS**

PREFACE

This document comprises the Plumbing Code Amendments to the 2000 Uniform Mechanical Code as published by the International Association of Plumbing and Mechanical Officials. It was developed by the City of Las Vegas to be adopted by reference. These provisions are not code unless adopted and codified by governmental jurisdictions. These amendments are not intended to prevent the use of any material or method of construction not specifically prescribed herein, provided any alternate has been approved and its use authorized by the building official. This document is available to be adopted as code by any jurisdiction without permission or approval from the City of Las Vegas.

TABLE OF CONTENTS

Preface

Chapter 1 Administration

205	Combustible Construction
311.4	Single Stack Drainage Waste and Vent Systems
318.4	Test Requirements (Food Handling Establishments)
402.10	Timing Devices
413	Minimum Number of Require Fixtures (Deleted) Table 4-1 Minimum Plumbing Facilities (Deleted)
517.3	Venting Requirements – Type B
603.4.13	Potable Water Supply to Carbonators
604.1	Materials
608.5	Relief Valves
609.3.3	Polyethylene Yard Piping
609.10.1	Air Chambers Table 6-6 Air Chambers (Deleted)
701.1.2	Materials
704.3	Fixture Connections (Drainage)
707.11	Cleanouts
710.1	Drainage of Fixtures Located Below the Next Upstream Manhole or Below the Main Sewer Level
801.2.2	Food and Beverage Handling Establishments
801.2.4	Floor Sinks
804.1	Indirect Waste Receptors
815	Condensate Waste and Control (Deleted)
903.1.2	Materials
1009	Interceptors
1010	Sand/Oil Interceptors
1011	Maintenance of Interceptors
1014	Abandoned Interceptors
1016	Interceptor Requirements for Existing Buildings
1017	Oil & Flammable Liquids Interceptors (Deleted)
1101.3	Materials
1101.5.1	Subsoil Drains
1101.1	Paved areas (Deleted)
1101.9	Filling Stations and Motor Vehicle Washing Establishments (Deleted)
1101.10	Paved Areas (Deleted)
1103	Traps on Storm Drains and Leaders (Deleted)
1104.3	Combining Storm with Sanitary Drainage (Deleted)
1209.7	Gas Meter Locations (Added)
1211.4	Installation of Gas Piping
1211.7	Gas Isolation Fittings (Deleted)
1213.5	and 1213.6 Liquid Petroleum Gas Facilities and piping (Deleted)

Chapter 13 Medical Gas Systems (Deleted)

**Chapter 15 Firestop Protection for DWV and
Stormwater Applications (Deleted)**

**Appendixes G and H
Gray Water Systems and Interceptors (Deleted)**

**Appendix J1
Reclaimed Water Systems**

**Appendix J2
Definitions**

**Appendix J10
Approved Uses of Reclaimed Water**

**Appendix K
Private Sewage Disposal Systems (Deleted)**

**Appendix L
Alternate Plumbing Systems**

Index of Amendments for Plumbing Code Committee

Section Number	Title	Amendment #	Flagged Items
Chapter One	Administration	1	
103.1.3	Licensing	2	*
205	Definitions: Combustible Construction	3	
311.4	Single Stack Drainage Waste & Vent System	4	
318.4	Test Requirements (Food Handling Establishments)	5	*
402.10	Timing Devices	6	
413	Minimum Number of Required Fixtures (Deleted)	7	
Table 4-1	Minimum Plumbing Facilities (Deleted)	8	
517.3	Venting Requirements – Type B	9	
603.4.13	Potable Water Supply to Carbonators		
604.1	Materials	10	
608.5	Relief Valves	11	
609.3.3	Polyethylene Yard Piping		
609.10.1	Air Chambers		
Table 6-6	Minimum Require Air Chamber Dimensions		
701.1.2	Materials		
704.3	Fixture Connections		
707.11	Cleanouts		
710.1	Drainage of Fixtures Located Below the Next . . .		
801.2.2	Food & Beverage Handling Establishments		
801.2.4	Floor Sinks		
804.1	Indirect Waste Receptors		
815	Condensate Waste and Control (Deleted)		
903.1.2	Materials		
1009	Interceptors		
1010	Sand/Oil Interceptors		
1011	Maintenance of Interceptors		
1014	Abandoned Interceptors		
1016	Interceptor Requirements for Existing Buildings		*
1017	Oil & Flammable Liquids Interceptors		

	(Deleted)		
1101.3	Materials		
1101.5.1	Subsoil Drains		
1101.9	Filling Stations & Motor Vehicle Washing Establishments (Deleted)		
1101.10	Paved Areas (Deleted)		
1103	Traps on Storm Drains & Leaders (Deleted)		
1104.3	Combining Storm with Sanitary Drainage (Deleted)		
1209.7	Gas Meter Locations		
1211	Installation of Gas Piping		
1211.7	Gas Isolation Fittings (Deleted)		
1213.5 – 1213.6	Liquid Petroleum Gas Facilities & Piping (Deleted)		
Chapter 13	Medical Gas Systems		
Chapter 15	Firestop Protection for DWV & Stormwater Applic.		
Appendix G	Gray Water Systems (Deleted)		
Appendix H	Interceptors (Deleted)		
Appendix J1	Reclaimed Water Systems		
Appendix J2	Definitions		
Appendix J10	Approved Uses of Reclaimed Water		
Appendix K	Private Disposal Systems (Deleted)		
Appendix L	Special Venting of Fixtures		

CHAPTER 1 ADMINISTRATION

Chapter 1 – Administration is deleted in its entirety and replaced with the following.

103.1.3

PLUMBING LICENSING PROVISION: It shall be the responsibility of every individual and every contractor to provide quality supervision while performing plumbing installations in the City of Las Vegas. The minimum job site requirements for an individual leading or direction the installation shall be of a Southern Nevada licensed journeyman plumber.

A minimum of a journeyman plumbing license, issued in Clark County, shall be provided to any code official by the lead plumbing individual at the jobsite where inspection of the work by the code official is determined not to meet minimum code requirements.

205C

Add a new definition to Section 205 to be placed in alphabetical order and to read as follows:

Combustible Construction – Combustible construction shall mean work within any building or structure classified as Type III-A Type III-B; Type IV – Heavy Timber; Type V-A or Type V-B as defined in the Building Code.

311.4 Single Stack Drainage Waste and Vent Systems

Amend Section 311.4 by deleting the second sentence and adding a new exception to read as follows:

311.4 Except as hereinafter provided in Sections 908.0, 909.0 and 910.0, no vent pipe shall be used as a soil or waste pipe, nor shall any soil or waste pipe be used as a vent.

Exception: Single stack DWV systems may be used provided they are designed by a Nevada Registered Mechanical Engineer and approved by the building official.

318.4 Test Requirements (Food Handling Establishments)

Amend Section 318.4 by deleting twenty-five (25) feet and replacing it with ten (10) feet.

318.4 Soil and drain pipes located above such areas shall be subjected to a standing water test of not less than ten (10) feet (3048 mm).

402.10 Timing Devices

Add a new Subsection 402.10 to read as follows:

402.10 A toilet or urinal which employs a timing device or other mechanism to flush periodically or which continually flushes shall not be installed.

413 Minimum Number of Required Fixtures (Deleted)

Delete Section 413 in its entirety. (Refer to the Building Code for number of fixture requirements.)

Table 4-1 Minimum Plumbing Facilities (Deleted)

Delete Table 4-1 in its entirety. (Note: Refer to the Building Code for minimum plumbing facility requirements.)

517.3 Venting Requirements – Type B

Amend Section 517.3 to read as follows:

Type B. Type B gas vents with listed vent caps twelve (12) inches (305 mm) in size or smaller shall be permitted to be terminated in accordance with Table 5-3, provided they are located at least four (4) feet (1219 mm) from a vertical wall or similar obstruction. All other Type B gas Vents shall terminate not less than two (2) feet (610 mm) above the highest point where they pass through the roof and at least two (2) feet (610 mm) higher than any portion of a building within (10) feet (3048 mm).

603.4.13 Potable Water Supply to Carbonators

Delete this section and add text as follows:

603.4.13 Potable water supply to carbonators shall be protected by a listed reduced pressure principle backflow preventer as approved by the Administrative Authority for the specific use.

604.1 Materials

Add a new sentence to the end of Section 604.1 to read as follows:

604.1 Water distribution pipe, building supply water pipe and fittings shall be of brass, copper, cast iron, galvanized malleable iron, galvanized wrought iron, galvanized steel, or other approved materials. Asbestos-cement, CPVC, PE, PVC or PEX water pipe manufactured to recognized standards may be used for cold water distribution systems outside a building. CPVC, PEX water pipe, tubing and fittings, manufactured to recognized standards may be used for hot and cold water distribution systems within a building. All materials used in the water supply system, except valves and similar devices shall be of a like material, except where otherwise approved by the Administrative Authority. Plastic piping shall be limited to buildings defined as combustible construction by this code.

608.5 Relief Valves

Amend Section 608.5 to read as follows:

608.5 Relief valves located inside a building shall be provided with a drain, not smaller than the relief valve outlet, of galvanized steel, hard drawn copper piping and fittings, CPVC, flexible corrugated connectors complying with 604.12, or listed relief valve drain tube with fittings which shall not reduce the internal bore of the piping or tubing (straight lengths as opposed to coils) and shall extend from the valve to the outside of the building with the end of the pipe not more than two (2) feet (610 mm) nor less than six (6) inches (152 mm) above the ground or the flood level of the area receiving the discharge and pointing downward. Such drains may terminate at other approved locations. No part of such drain pipe shall be trapped or subject to freezing. The terminal end of the drain pipe shall not be threaded.

609.3.3 Polyethylene Yard Piping

Add a new section to read as follows:

609.3.3 Polyethylene yard piping may be installed continuously into the garage stem wall portion of the garage. The piping placement under the structure and into the wall shall be through a sleeve of like material and be a minimum of 1 pipe size larger than the pipe the sleeve serves. The sleeve shall

terminate a minimum of 6 inches above the top of the concrete and the water piping 6 inches above the sleeve.

609.10.1 Air Chambers

Amend Section 609.10.1 to read as follows:

- 609.10.1 When air chambers are installed, each air chamber shall be provided with acceptable means for restoring the air in the event that the chamber becomes waterlogged.

Table 6-6 Minimum Required Air Chamber Dimensions

Delete Table 6-6 in its entirety.

701.1.2 Materials

Delete Section 701.1.2 in its entirety and add a new Section 701.1.2 to read as follows:

- 701.1.2 Plastic piping used for drainage waste and vent systems shall be limited to buildings defined as combustible construction by this code.

704.3 Fixture Connections

Amend Section 704.3 to read as follows:

- 704.3 Pot sinks, scullery sinks, dishwashing sinks, silverware sinks, commercial dishwashing machines, and other similar fixtures shall be indirectly connected to the drainage systems by means of an air gap.

707.11 Cleanouts

Add an exception to the end of Section 707.11 to read as follows:

- 707.11 Cleanout fittings shall not be less in size than those given in Table 7-6.

Exception: Where a 2-1/2" (inch) cleanout is required, a 2" (inch) cleanout may be used for horizontal branch waste lines in single-family dwellings.

710.1 Drainage of Fixtures Located Below the Next Upstream Manhole or Below the Main Sewer Level

Section 710.1 is amended to read as follows:

710.1 Drainage piping serving fixtures which have flood level rims located below the elevation of the next upstream manhole cover of the public or private sewer serving such drainage piping shall be protected from backflow of sewage by installing an approved type backwater valve. Other than single family dwellings, fixtures above such elevation shall not discharge through the backwater valve.

801.2.2 Food and Beverage Handling Establishments

Delete "or airbreak" from the fifth sentence of Section 801.2.2.

801.2.2 For walk-in coolers, floor drains may be connected to a separate drainage line discharging into an outside receptor. The flood level rim of the receptor shall be a minimum of six (6) inches (152 mm) lower than the lowest floor drain. Such floor drains shall be trapped and individually vented. Cleanouts shall be provided at every ninety (90) degree (1.6 rad) turn and shall be accessibly located. Such waste shall discharge through an airgap into a trapped and vented receptor, except that full-size airgap is required where the indirect waste pipe may be under vacuum.

801.2.4 Floor Sinks

Add a new Section 801.2.4 to read as follows:

801.2.4 Floor Sinks. Floor sinks shall be installed flush with the finished floor and shall be accessible for cleaning.

804.1 Indirect Waste Receptors

Add a second paragraph to Section 804.1 to read as follows:

When any discharge piping other than the discharge from the wash machine is terminated into the washer box, a second port washer box shall be used. The second port shall be permanently connected to the vertical receptor standpipe via a wye branch fitting at the time of rough plumbing. The wash machine shall discharge by an airbreak into the most vertical or primary receptor standpipe. All other discharge piping shall discharge into the second port via the following terminations: i.e. Water softener-airbreak; T&P-airgap; Condensate-airbreak. The T&P discharge shall be taken to the exterior of the building unless structural conditions or manufacturers listed distances prevent this termination. Temperature and pressure relief lines may terminate to the following fixtures located in normally unoccupied areas: floor sink, or a floor drain.

815 Condensate Waste and Control (Deleted)

Delete Section 815 in its entirety. (Note: Refer to the Mechanical Code for air conditioning equipment requirements.) The deleted Sections (which include their Subsections) are as follows: 815.0, 815.1, 815.2, 815.3 and its Subsections.

903.1.2 Materials

Delete Section 903.1.2 in its entirety and add a new Section 903.1.2 to read as follows:

903.1.2 Plastic piping used for drainage waste and vent systems shall be limited to buildings defined as combustible construction by this code.

1009 Interceptors

Delete Section 1009 in its entirety and add a new Section 1009 to read as follows:

1009.0 Grease Interceptors

(A) General. A grease interceptor shall be provided for proper handling of liquid wastes containing grease. A grease interceptor as described in these standards shall be installed in any business establishment with kitchen facilities including restaurants, cafes, lunch counters, cafeterias, supermarkets, convenience stores, bakeries, bars and clubs, hotels,

hospitals, sanitariums, factory or school kitchens, or any other commercial establishment where grease may be introduced into the sewer system.

Special consideration shall be given to every fish, fowl and animal slaughterhouse or establishment; every fish, fowl and meat packing or curing establishment; every soap factory, tallow rendering, fat rendering and hide curing establishment; or any other establishment from which considerable amounts of grease are likely to be discharged into the sewer system. Written application describing exact operation and anticipated volumes of grease shall be made to the sanitation authority to determine the standards for such systems.

- (B) Fixtures. The waste discharge from fixtures and equipment which may contain grease from the businesses set out previously shall be drained through a grease interceptor or grease interceptors. Fixtures such as, but not limited to, the following are included: scullery sinks, pot and pan sinks, dishwashing machines, soup kettles and similar cooking equipment, trash compactors, floor drains in grease generating areas, and trash can wash areas.
- (C) Prohibited fixtures. The waste lines from toilets, urinals, and other similar fixtures shall not drain through a grease interceptor.
- (D) High heat discharge. When the temperature of any waste discharge is in excess of 140°F (60°C) and drains through a grease interceptor, the size of the interceptor shall be doubled. The addition of cold water to the influent of the interceptor is not allowed.
- (E) Location.
 - 1. Grease interceptors shall be so installed and connected that they shall be at all times easily accessible for inspection, cleaning and removal of the intercepted grease.
 - 2. Grease interceptors shall be placed as close as practical to the fixtures served.
 - 3. Grease interceptors shall be located on the exterior of buildings unless specifically approved otherwise in writing by the health district.

4. Grease interceptors shall be so located as to be accessible for service without the use of ladders or the removal of bulky equipment.
5. Location of all grease interceptors shall be shown on the approved plans.
6. Each grease interceptor shall serve only one business establishment. Multiple business connections to a single receptor are not permitted, unless approved by the sanitation in writing.

(F) Size

1. Grease interceptors shall be sized in accordance with the following formula based on wastewater flow:

$$D^{.75} \times (GL) \times (HR)/2 \times LF = \text{Interceptor size in gallons}$$

Where:

D = number of seats in dining area; NOTE: to the .75 power

GL = gallons of wastewater per meal (normally four gallons)

HR = number of hours the business is open per day (highest)

LF = loading factor (0.5) NOTE: Loading factor shall be one (1.0) where high heat discharge is present as defined previously.

NOTE: Minimum interceptor size shall be 400 gallons. For situations not covered by the preceding formula, a submittal showing the interceptor size and calculations shall be approved by the sanitation authority prior to building official plan approval. For business establishments other than commercial restaurants, a specific submittal shall be approved by the sanitation authority prior to building official plan approval. Such designs shall be prepared by a Nevada Registered Engineer.

2. All grease interceptors shall have a minimum of two compartments with a minimum of three (3) inch diameter fittings designed for grease retention. The fittings shall be installed in the following manner: A 90° long sweep or sanitary tee shall be installed at the inlet, sanitary tee on the inlet side of the interceptor baffle, and a sanitary tee installed at the outlet.

3. There shall be adequate access for cleaning all areas of the separator. A minimum of one access point into each compartment within the separator shall be provided. In addition, no access points shall be further apart than ten (10) feet regardless of the number of compartments. Separator covers shall be of gas-tight construction. Interceptor covers shall have a minimum opening dimension of twenty (20) inches in diameter.
4. All waste shall enter the grease interceptor through the inlet pipe.
5. Grease interceptors shall be so designed that they will not become air bound. Each interceptor shall be properly vented with a relief vent located on the outlet side of the interceptor.
6. Cleanouts shall be installed in the drainage piping inlet and the outlet side of each grease interceptor.
7. Each fixture discharging into a grease interceptor shall be individually trapped and vented in an approved manner. An approved type grease interceptor may be used as a fixture trap or a single fixture when the horizontal distance between the fixture outlet and the grease interceptor does not exceed four (4) feet (1.2 m) and the vertical tailpipe or drain between the fixture outlet and the grease interceptor does not exceed two and one-half (2-1/2) feet (0.8 m).
8. No water jacketed grease trap or grease interceptor shall be approved or installed.
9. Each grease interceptor shall have an approved water seal of not less than two (2) inches (50.8 mm) in depth or the diameter of its outlet whichever is greater.
10. When grease interceptors are located in areas of pedestrian or vehicle travel, the design of the interceptor shall be adequate to support the imposed load. Structural calculations to verify its adequacy may be required.
11. Design standards other than those listed above may be acceptable. Redwood baffles shall not be used for new or existing interceptors. Any alternate design shall be prepared by a Nevada Registered Engineer and submitted for review and approval by the sanitation authority and the building official.

12. A sample box shall be provided on the outlet side of each grease interceptor down stream of the required cleanout and vent.
- (G) Water Test. A water test shall be applied to the level of the top of the interceptor inlet opening through the outlet opening or discharge side of the sample box. Interceptors shall show no leakage from section seams, pinholes or other imperfections. Any leakage below this level is cause for rejection.
1. Backfill. Interceptors shall not be backfilled until the inspection has been made to verify there are no leaks.

1010 Sand/Oil Interceptors

Delete Section 1010 in its entirety and add a new Section 1010 to read as follows:

1010.0 Sand/Oil Interceptors.

- (A) Where Required. An interceptor shall be provided for the proper handling of liquid wastes containing oil (of petroleum origin), said, inert solids, or any other similar substances.

NOTE: A sand/oil interceptor is not intended for the disposal of hazardous waste or as a backup system for accidental spills.

Interceptors as described in these standards shall be installed in, but not limited to, the following locations: car washes, motor vehicle, boat or airplane storage yards, gasoline and diesel service stations, repair garages or any other similar facility which may introduce sand and oil into the sewer system.

Submittal of a written application, describing the exact facility operation and the types and anticipated volumes of waste to be generated, may be required by the building official.

- (B) Fixtures. The waste discharge from fixtures and equipment which may contain sand, oil-based wastes, and inert solids shall drain only through an interceptor. This requirement includes, but is not limited to, the following: floor drains, floor sinks, special processing equipment, trench drains, and area drains.

(C) Prohibited Fixtures. The waste line from toilets, urinals, lavatories and other similar fixtures, which discharge domestic wastes only, shall not drain through the interceptor.

(D) High Heat Discharge to Separators. When the temperature of the waste to be drained through a separator exceeds 140°F (60°C), the size of the interceptor shall be doubled. The addition of cold water to the influent of the interceptor is not allowed.

(E) Location.

1. Sand/oil interceptors shall be so installed and connected that they shall be at all times accessible for inspection, cleaning and removal of the intercepted waste.
2. Sand/oil interceptors shall be placed as close as practical to the fixtures served.
3. Sand/oil interceptors shall be located on the exterior of buildings unless specifically approved otherwise in writing by the sanitation authority.
4. Sand/oil interceptors shall be located as to be accessible for service without the use of ladders or removal of bulky equipment.
5. Location of all sand/oil interceptors shall be shown on the approved plans.
6. Each sand/oil interceptor shall serve only one business establishment. Multiple business connections to a single sand/oil interceptor are not permitted unless approved by the sanitation authority in writing.

(F) Size and Design.

1. When separators are located in areas of foot or vehicle traffic, the design of the separator shall be adequate for the imposed load. Structural calculations performed by a Nevada Registered Engineer to verify adequacy may be required.

2. Any private or public wash rack or slab used for cleaning machinery or machine parts shall drain to a sand/oil separator, and shall be adequately protected against storm or surface water intrusion.
 3. Design standards other than those listed above may be acceptable. Redwood baffles shall not be used for new or existing interceptors. Any alternate design shall be prepared by a Nevada Registered Engineer and submitted for review and approval by the sanitation authority and the building official.
 4. Cleanouts shall be installed in the drainage piping inlet and outlet side of each sand/oil interceptor.
 5. A sample box shall be provided on the outlet side of the interceptor down stream of the required cleanout and vent.
- (G) Water Test. A water test shall be applied to the level of the top of the interceptor inlet opening through the outlet opening or discharge side of the sample box. Interceptors shall show no leakage from section seams, pinholes or other imperfections. Any leakage below this level is cause for rejection.
1. Backfill. Interceptors shall not be backfilled with the inspection has been made to verify there are no leaks.

1011 Maintenance of Interceptors

Delete Section 1011.0 in its entirety and add a new Section 1011 to read as follows:

1011.0 Maintenance of Interceptors.

- (A) Grease and sand/oil interceptors shall be maintained in efficient operating condition by periodic removal of the accumulated grease or sand/oil. No such collected grease, sand/oil, or any material collected from the interceptor shall be introduced into any drainage piping, public or private sewers. The materials removed from interceptors shall be handled and disposed of in a proper manner in accordance with published health district and

sanitation authority requirements. Illegal dumping of waste into the sewer shall not be allowed.

- (B) Maintenance records for each installed interceptor shall be maintained on the premises at all times and presented to a duly authorized agent of the sanitation district upon request.
- (C) The enforcement of the interceptor maintenance requirements shall be the responsibility of the sanitation district.

1014 Abandoned Interceptors

Delete Section 1014. in its entirety and add a new Section 1014 to read as follows:

- 1014.0 Abandoned Interceptors. Abandoned interceptors shall be cleaned and filled as required by Section 722.0 of the Plumbing Code for abandoned sewers and sewage disposal facilities.

1016 Interceptor Requirements for Existing Buildings.

Delete Section 1016.0 in its entirety and add a new Section 1016.0 to read as follows:

- 1016.0 If no interceptor is presently installed in a building for which a business requiring an interceptor is proposed, then one or more interceptors and building fixtures shall be installed in the building to meet these standards.

Before any existing business, which has a complying or non-complying interceptor, increases the size of its business, its load on the interceptor, or is transferred in ownership, the building fixtures and interceptor shall be brought into compliance with these standards as if for new construction.

1017 Oil and Flammable Liquids Interceptors (Deleted)

Delete Section 1017 in its entirety.

1101.3 Materials.

Delete Section 1101.3 in its entirety and add a new Section 1101.3 to read as follows:

1101.3 Plastic piping used for rainwater systems shall be limited to buildings defined as combustible construction by this code.

1101.5.1 Subsoil Drains

Amend the first sentence of Section 1101.5.1 to read as follows:

Where required by the geotechnical engineer or the building official, subsoil drains shall be provided around the perimeter of buildings having basements, cellars, or crawl spaces or floors below grade.

**1101.9 Filling Stations and Motor Vehicle Washing Establishments.
(Deleted)**

Delete Section 1101.9 in its entirety.

1101.10 Paved Areas (Deleted)

Delete Section 1101.10 in its entirety.

1103 Traps on Storm Drains and Leaders (Deleted)

Delete Section 1103 in its entirety.

1104.3 Combining Storm with Sanitary Drainage (Deleted)

Delete Section 1104.3 in its entirety.

1209.7 Gas Meter Locations (Added)

Add a new section 1209.7 to read as follows:

1209.7 All lots in mobile home parks and lots in recreational vehicle parks shall be served individually by the duly franchised gas serving utility supplying gas from the street main.

1211.4 Installation of Gas Piping

Add a new sentence to the end of the first paragraph of Section 1211.4 to read as follows:

All gas piping under a slab shall be capable of being removed and replaced.

1211.7 Gas Isolation Fittings (Deleted)

Delete Section 1211.7 in its entirety.

1213.5 and 1213.6 Liquid Petroleum Gas Facilities and Piping (Deleted)

Delete Sections 1213.5 and 1213.6 in their entirety. See LPG State Regulations.

Chapter 13 Medical Gas Systems

Delete Chapter 13 in its entirety.

Chapter 15 Firestop Protection for DWV and Stormwater Applications

Delete Chapter 15 in its entirety.

Appendix G - Graywater Systems and Appendix H – Interceptors

Delete Appendix G and Appendix H in their entirety.

Appendix J1 Reclaimed Water Systems – General

Amend Appendix J1 paragraph (a) to read as follows:

- (a) The provisions of the appendix shall apply to the installation, construction, alteration, and repair of reclaimed water systems intended to supply water closets, urinals, and trap primers for floor drains and floor sinks and collect gray water for other authorized systems by the authority having jurisdiction. Use is limited to these fixtures that are located

in non-residential buildings. Fixtures within residential buildings are excluded from the list of approved uses. The reclaimed water systems shall have no connection to any potable water system, with or without mechanical backflow prevention devices. If reclaimed water is utilized on the premises, all potable water supplies shall be provided with appropriate backflow protection, as required by the authority having jurisdiction. Except as otherwise provided for in this appendix, the provisions of this Code shall be applicable to reclaimed water system installations.

Appendix J2 Definitions

Amend Appendix J2 to read as follows:

Reclaimed water is water which, as a result of tertiary treatment of domestic wastewater by a public agency, is suitable for a direct beneficial use or a controlled use that would not otherwise occur. The level of treatment and quality of the reclaimed water shall be approved by the State of Nevada Department of Environmental Protection.

Appendix J10 Approved Uses of Reclaimed Water

Amend Appendix J10 to read as follows:

Use of reclaimed water shall require approval of the authority having jurisdiction and the officials designated by the State of Nevada Department of Environmental Protection.

Appendix K Private Sewage Disposal Systems (Deleted)

Delete Appendix K in its entirety.

Appendix L6.0 Special Venting of Fixtures (Deleted)

Delete Appendix L6.0 in its entirety.

FIRST AMENDMENT

BILL NO. 2002-106

ORDINANCE NO. _____

AN ORDINANCE TO ADOPT THE 2000 EDITION OF THE UNIFORM PLUMBING CODE, TOGETHER WITH AMENDMENTS THERETO, AND TO PROVIDE FOR OTHER RELATED MATTERS.

Proposed by: Paul K. Wilkins,
Director of Building and Safety

Summary: Adopts the 2000 Edition of the Uniform Plumbing Code, together with amendments thereto, as the City's Plumbing Code.

THE CITY COUNCIL OF THE CITY OF LAS VEGAS DOES HEREBY ORDAIN
AS FOLLOWS:

SECTION 1: Title 16, Chapter 28, Section 10, of the Municipal Code of the City of Las Vegas, Nevada, 1983 Edition, is hereby amended to read as follows:

16.28.010: Those certain documents, three copies of each being on file in the Office of the City Clerk, and designated as follows, are adopted by reference and made a part of this Code, to the same effect as if set out herein in full:

(A) Uniform Plumbing Code, [1997] 2000 Edition, including its Standards and Appendices, except as otherwise indicated, designated as Part 1 of this Chapter;

(B) A document entitled ["1997 Southern Nevada Plumbing Code Amendments, as modified herein,"] "Southern Nevada 2000 Plumbing Code Amendments," adding to, deleting from and amending the Uniform Plumbing Code, [1997] 2000 Edition, designated as Part 2 of this Chapter.

SECTION 2: Section 313.5 of the Uniform Plumbing Code, 2000 Edition, is amended by adding thereto a new sentence, reading as follows:

All copper water piping under the slab must be sleeved.

SECTION 3: The Uniform Plumbing Code, 1997 Edition, and the 1997 Southern Nevada Plumbing Code Amendments are hereby repealed in their entirety.

SECTION 4: If any section, subsection, subdivision, paragraph, sentence, clause or phrase in this ordinance or any part thereof, is for any reason held to be unconstitutional, or invalid or ineffective by any court of competent jurisdiction, such decision shall not affect the validity or

1 effectiveness of the remaining portions of this ordinance or any part thereof. The City Council of the
2 City of Las Vegas hereby declares that it would have passed each section, subsection, subdivision,
3 paragraph, sentence, clause or phrase thereof irrespective of the fact that any one or more sections,
4 subsections, subdivisions, paragraphs, sentences, clauses or phrases be declared unconstitutional,
5 invalid or ineffective.

6 SECTION 5: Whenever in this ordinance any act is prohibited or is made or declared
7 to be unlawful or an offense or a misdemeanor, or whenever in this ordinance the doing of any act is
8 required or the failure to do any act is made or declared to be unlawful or an offense or a
9 misdemeanor, the doing of such prohibited act or the failure to do any such required act shall
10 constitute a misdemeanor and upon conviction thereof, shall be punished by a fine of not more than
11 \$1,000.00 or by imprisonment for a term of not more than six months, or by any combination of such
12 fine and imprisonment. Any day of any violation of this ordinance shall constitute a separate offense.

13 SECTION 6: All ordinances or parts of ordinances or sections, subsections, phrases,
14 sentences, clauses or paragraphs contained in the Municipal Code of the City of Las Vegas, Nevada,
15 1983 Edition, in conflict herewith are hereby repealed.

16 PASSED, ADOPTED and APPROVED this ____ day of _____, 2002.

17 APPROVED:

18
19 By _____
OSCAR B. GOODMAN, Mayor

20 ATTEST:

21
22 BARBARA JO RONEMUS, City Clerk

23 APPROVED AS TO FORM:

24 Val Steed 10-15-02
25 Date

1 The above and foregoing ordinance was first proposed and read by title to the City Council on the
2 ____ day of _____, 2002, and referred to the following committee composed of
3 _____ and _____ for recommendation;
4 thereafter the said committee reported favorably on said ordinance on the ____ day of
5 _____, 2002, which was a _____ meeting of said Council; that at said
6 _____ meeting, the proposed ordinance was read by title to the City Council
7 as amended and adopted by the following vote:

8 VOTING "AYE": _____

9 VOTING "NAY": _____

10 ABSENT: _____

11

12 APPROVED:

13

14 By _____
OSCAR B. GOODMAN, Mayor

15 ATTEST:

16

17 BARBARA JO RONEMUS, City Clerk

18

19

20

21

22

23

24

25

26

27

28

**SOUTHERN NEVADA 2000
PLUMBING CODE AMENDMENTS**

PREFACE

This document comprises the Plumbing Code Amendments to the 2000 Uniform Mechanical Code as published by the International Association of Plumbing and Mechanical Officials. It was developed by the City of Las Vegas to be adopted by reference. These provisions are not code unless adopted and codified by governmental jurisdictions. These amendments are not intended to prevent the use of any material or method of construction not specifically prescribed herein, provided any alternate has been approved and its use authorized by the building official. This document is available to be adopted as code by any jurisdiction without permission or approval from the City of Las Vegas.

TABLE OF CONTENTS

Preface

Chapter 1 Administration

205	Combustible Construction
311.4	Single Stack Drainage Waste and Vent Systems
318.4	Test Requirements (Food Handling Establishments)
402.10	Timing Devices
413	Minimum Number of Require Fixtures (Deleted)
	Table 4-1 Minimum Plumbing Facilities (Deleted)
517.3	Venting Requirements – Type B
603.4.13	Potable Water Supply to Carbonators
604.1	Materials
608.5	Relief Valves
609.10.1	Air Chambers
	Table 6-6 Air Chambers (Deleted)
701.1.2	Materials
704.3	Fixture Connections (Drainage)
707.11	Cleanouts
710.1	Drainage of Fixtures Located Below the Next Upstream Manhole or Below the Main Sewer Level
801.2.2	Food and Beverage Handling Establishments
801.2.4	Floor Sinks
804.1	Indirect Waste Receptors
815	Condensate Waste and Control (Deleted)
903.1.2	Materials
1009	Interceptors
1010	Sand/Oil Interceptors
1011	Maintenance of Interceptors
1014	Abandoned Interceptors
1016	Interceptor Requirements for Existing Buildings
1017	Oil & Flammable Liquids Interceptors (Deleted)
1101.3	Materials
1101.5.1	Subsoil Drains
1101.1	Paved areas (Deleted)
1101.9	Filling Stations and Motor Vehicle Washing Establishments (Deleted)
1101.10	Paved Areas (Deleted)
1103	Traps on Storm Drains and Leaders (Deleted)
1104.3	Combining Storm with Sanitary Drainage (Deleted)
1209.7	Gas Meter Locations (Added)
1211.4	Installation of Gas Piping
1211.7	Gas Isolation Fittings (Deleted)
1213.5	and 1213.6 Liquid Petroleum Gas Facilities and piping (Deleted)

Chapter 13 Medical Gas Systems (Deleted)

**Chapter 15 Firestop Protection for DWV and
Stormwater Applications (Deleted)**

**Appendixes G and H
Gray Water Systems and Interceptors (Deleted)**

**Appendix J1
Reclaimed Water Systems**

**Appendix J2
Definitions**

**Appendix J10
Approved Uses of Reclaimed Water**

**Appendix K
Private Sewage Disposal Systems (Deleted)**

**Appendix L
Alternate Plumbing Systems**

Index of Amendments for Plumbing Code Committee

Section Number	Title	Amendment #	Flagged Items
Chapter One	Administration	1	
103.1.3	Licensing	2	*
205	Definitions: Combustible Construction	3	
311.4	Single Stack Drainage Waste & Vent System	4	
318.4	Test Requirements (Food Handling Establishments)	5	*
402.10	Timing Devices	6	
413	Minimum Number of Required Fixtures (Deleted)	7	
Table 4-1	Minimum Plumbing Facilities (Deleted)	8	
517.3	Venting Requirements – Type B	9	
603.4.13	Potable Water Supply to Carbonators		
604.1	Materials	10	
608.5	Relief Valves	11	
609.10.1	Air Chambers		
Table 6-6	Minimum Require Air Chamber Dimensions		
701.1.2	Materials		
704.3	Fixture Connections		
707.11	Cleanouts		
710.1	Drainage of Fixtures Located Below the Next . . .		
801.2.2	Food & Beverage Handling Establishments		
801.2.4	Floor Sinks		
804.1	Indirect Waste Receptors		
815	Condensate Waste and Control (Deleted)		
903.1.2	Materials		
1009	Interceptors		
1010	Sand/Oil Interceptors		
1011	Maintenance of Interceptors		
1014	Abandoned Interceptors		
1016	Interceptor Requirements for Existing Buildings		*
1017	Oil & Flammable Liquids Interceptors (Deleted)		

1101.3	Materials		
1101.5.1	Subsoil Drains		
1101.9	Filling Stations & Motor Vehicle Washing Establishments (Deleted)		
1101.10	Paved Areas (Deleted)		
1103	Traps on Storm Drains & Leaders (Deleted)		
1104.3	Combining Storm with Sanitary Drainage (Deleted)		
1209.7	Gas Meter Locations		
1211	Installation of Gas Piping		
1211.7	Gas Isolation Fittings (Deleted)		
1213.5 – 1213.6	Liquid Petroleum Gas Facilities & Piping (Deleted)		
Chapter 13	Medical Gas Systems		
Chapter 15	Firestop Protection for DWV & Stormwater Applic.		
Appendix G	Gray Water Systems (Deleted)		
Appendix H	Interceptors (Deleted)		
Appendix J1	Reclaimed Water Systems		
Appendix J2	Definitions		
Appendix J10	Approved Uses of Reclaimed Water		
Appendix K	Private Disposal Systems (Deleted)		
Appendix L	Special Venting of Fixtures		

CHAPTER 1 ADMINISTRATION

Chapter 1 – Administration is deleted in its entirety and replaced with the following.

103.1.3

PLUMBING LICENSING PROVISION: It shall be the responsibility of every individual and every contractor to provide quality supervision while performing plumbing installations in the City of Las Vegas. The minimum job site requirements for an individual leading or direction the installation shall be of a Southern Nevada licensed journeyman plumber.

A minimum of a journeyman plumbing license, issued in Clark County, shall be provided to any code official by the lead plumbing individual at the jobsite where inspection of the work by the code official is determined not to meet minimum code requirements.

205C

Add a new definition to Section 205 to be placed in alphabetical order and to read as follows:

Combustible Construction – Combustible construction shall mean work within any building or structure classified as Type III-A Type III-B; Type IV – Heavy Timber; Type V-A or Type V-B as defined in the Building Code.

311.4 Single Stack Drainage Waste and Vent Systems

Amend Section 311.4 by deleting the second sentence and adding a new exception to read as follows:

311.4 Except as hereinafter provided in Sections 908.0, 909.0 and 910.0, no vent pipe shall be used as a soil or waste pipe, nor shall any soil or waste pipe be used as a vent.

Exception: Single stack DWV systems may be used provided they are designed by a Nevada Registered Mechanical Engineer and approved by the building official.

318.4 Test Requirements (Food Handling Establishments)

Amend Section 318.4 by deleting twenty-five (25) feet and replacing it with ten (10) feet.

318.4 Soil and drain pipes located above such areas shall be subjected to a standing water test of not less than ten (10) feet (3048 mm).

402.10 Timing Devices

Add a new Subsection 402.10 to read as follows:

402.10 A toilet or urinal which employs a timing device or other mechanism to flush periodically or which continually flushes shall not be installed.

413 Minimum Number of Required Fixtures (Deleted)

Delete Section 413 in its entirety. (Refer to the Building Code for number of fixture requirements.)

Table 4-1 Minimum Plumbing Facilities (Deleted)

Delete Table 4-1 in its entirety. (Note: Refer to the Building Code for minimum plumbing facility requirements.)

517.3 Venting Requirements – Type B

Amend Section 517.3 to read as follows:

Type B. Type B gas vents with listed vent caps twelve (12) inches (305 mm) in size or smaller shall be permitted to be terminated in accordance with Table 5-3, provided they are located at least four (4) feet (1219 mm) from a vertical wall or similar obstruction. All other Type B gas Vents shall terminate not less than two (2) feet (610 mm) above the highest point where they pass through the roof and at least two (2) feet (610 mm) higher than any portion of a building within (10) feet (3048 mm).

603.4.13 Potable Water Supply to Carbonators

Delete this section and add text as follows:

603.4.13 Potable water supply to carbonators shall be protected by a listed reduced pressure principle backflow preventer as approved by the Administrative Authority for the specific use.

604.1 Materials

Add a new sentence to the end of Section 604.1 to read as follows:

604.1 Water distribution pipe, building supply water pipe and fittings shall be of brass, copper, cast iron, galvanized malleable iron, galvanized wrought iron, galvanized steel, or other approved materials. Asbestos-cement, CPVC, PE, PVC or PEX water pipe manufactured to recognized standards may be used for cold water distribution systems outside a building. CPVC, PEX water pipe, tubing and fittings, manufactured to recognized standards may be used for hot and cold water distribution systems within a building. All materials used in the water supply system, except valves and similar devices shall be of a like material, except where otherwise approved by the Administrative Authority. Plastic piping shall be limited to buildings defined as combustible construction by this code.

608.5 Relief Valves

Amend Section 608.5 to read as follows:

608.5 Relief valves located inside a building shall be provided with a drain, not smaller than the relief valve outlet, of galvanized steel, hard drawn copper piping and fittings, CPVC, flexible corrugated connectors complying with 604.12, or listed relief valve drain tube with fittings which shall not reduce the internal bore of the piping or tubing (straight lengths as opposed to coils) and shall extend from the valve to the outside of the building with the end of the pipe not more than two (2) feet (610 mm) nor less than six (6) inches (152 mm) above the ground or the flood level of the area receiving the discharge and pointing downward. Such drains may terminate at other approved locations. No part of such drain pipe shall be trapped or subject to freezing. The terminal end of the drain pipe shall not be threaded.

609.10.1 Air Chambers

Amend Section 609.10.1 to read as follows:

609.10.1 When air chambers are installed, each air chamber shall be provided with acceptable means for restoring the air in the event that the chamber becomes waterlogged.

Table 6-6 Minimum Required Air Chamber Dimensions

Delete Table 6-6 in its entirety.

701.1.2 Materials

Delete Section 701.1.2 in its entirety and add a new Section 701.1.2 to read as follows:

701.1.2 Plastic piping used for drainage waste and vent systems shall be limited to buildings defined as combustible construction by this code.

704.3 Fixture Connections

Amend Section 704.3 to read as follows:

704.3 Pot sinks, scullery sinks, dishwashing sinks, silverware sinks, commercial dishwashing machines, and other similar fixtures shall be indirectly connected to the drainage systems by means of an air gap.

707.11 Cleanouts

Add an exception to the end of Section 707.11 to read as follows:

707.11 Cleanout fittings shall not be less in size than those given in Table 7-6.

Exception: Where a 2-1/2" (inch) cleanout is required, a 2" (inch) cleanout may be used for horizontal branch waste lines in single-family dwellings.

710.1 Drainage of Fixtures Located Below the Next Upstream Manhole or Below the Main Sewer Level

Section 710.1 is amended to read as follows:

710.1 Drainage piping serving fixtures which have flood level rims located below the elevation of the next upstream manhole cover of the public or private sewer serving such drainage

piping shall be protected from backflow of sewage by installing an approved type backwater valve. Other than single family dwellings, fixtures above such elevation shall not discharge through the backwater valve.

801.2.2 Food and Beverage Handling Establishments

Delete "or airbreak" from the fifth sentence of Section 801.2.2.

801.2.2 For walk-in coolers, floor drains may be connected to a separate drainage line discharging into an outside receptor. The flood level rim of the receptor shall be a minimum of six (6) inches (152 mm) lower than the lowest floor drain. Such floor drains shall be trapped and individually vented. Cleanouts shall be provided at every ninety (90) degree (1.6 rad) turn and shall be accessibly located. Such waste shall discharge through an airgap into a trapped and vented receptor, except that full-size airgap is required where the indirect waste pipe may be under vacuum.

801.2.4 Floor Sinks

Add a new Section 801.2.4 to read as follows:

801.2.4 Floor Sinks. Floor sinks shall be installed flush with the finished floor and shall be accessible for cleaning.

804.1 Indirect Waste Receptors

Add a second paragraph to Section 804.1 to read as follows:

When any discharge piping other than the discharge from the wash machine is terminated into the washer box, a second port washer box shall be used. The second port shall be permanently connected to the vertical receptor standpipe via a wye branch fitting at the time of rough plumbing. The wash machine shall discharge by an airbreak into the most vertical or primary receptor standpipe. All other discharge piping shall discharge into the second port via the following terminations: i.e. Water softener-airbreak; T&P-airgap; Condensate-airbreak. The T&P discharge shall be taken to the exterior of the building unless structural conditions or manufacturers listed distances prevent this termination. Temperature and pressure relief lines may terminate to the following fixtures located in normally unoccupied areas: floor sink, or a floor drain.

815 Condensate Waste and Control (Deleted)

Delete Section 815 in its entirety. (Note: Refer to the Mechanical Code for air conditioning equipment requirements.) The deleted Sections (which include their Subsections) are as follows: 815.0, 815.1, 815.2, 815.3 and its Subsections.

903.1.2 Materials

Delete Section 903.1.2 in its entirety and add a new Section 903.1.2 to read as follows:

903.1.2 Plastic piping used for drainage waste and vent systems shall be limited to buildings defined as combustible construction by this code.

1009 Interceptors

Delete Section 1009 in its entirety and add a new Section 1009 to read as follows:

1009.0 Grease Interceptors

(A) General. A grease interceptor shall be provided for proper handling of liquid wastes containing grease. A grease interceptor as described in these standards shall be installed in any business establishment with kitchen facilities including restaurants, cafes, lunch counters, cafeterias, supermarkets, convenience stores, bakeries, bars and clubs, hotels, hospitals, sanitariums, factory or school kitchens, or any other commercial establishment where grease may be introduced into the sewer system.

Special consideration shall be given to every fish, fowl and animal slaughterhouse or establishment; every fish, fowl and meat packing or curing establishment; every soap factory, tallow rendering, fat rendering and hide curing establishment; or any other establishment from which considerable amounts of grease are likely to be discharged into the sewer system. Written application describing exact operation and anticipated volumes of grease shall be made to the sanitation authority to determine the standards for such systems.

- (B) Fixtures. The waste discharge from fixtures and equipment which may contain grease from the businesses set out previously shall be drained through a grease interceptor or grease interceptors. Fixtures such as, but not limited to, the following are included: scullery sinks, pot and pan sinks, dishwashing machines, soup kettles and similar cooking equipment, trash compactors, floor drains in grease generating areas, and trash can wash areas.
- (C) Prohibited fixtures. The waste lines from toilets, urinals, and other similar fixtures shall not drain through a grease interceptor.
- (D) High heat discharge. When the temperature of any waste discharge is in excess of 140°F (60°C) and drains through a grease interceptor, the size of the interceptor shall be doubled. The addition of cold water to the influent of the interceptor is not allowed.
- (E) Location.
1. Grease interceptors shall be so installed and connected that they shall be at all times easily accessible for inspection, cleaning and removal of the intercepted grease.
 2. Grease interceptors shall be placed as close as practical to the fixtures served.
 3. Grease interceptors shall be located on the exterior of buildings unless specifically approved otherwise in writing by the health district.
 4. Grease interceptors shall be so located as to be accessible for service without the use of ladders or the removal of bulky equipment.
 5. Location of all grease interceptors shall be shown on the approved plans.
 6. Each grease interceptor shall serve only one business establishment. Multiple business connections to a single receptor are not permitted, unless approved by the sanitation in writing.

(F) Size

1. Grease interceptors shall be sized in accordance with the following formula based on wastewater flow:

$$D^{.75} \times (GL) \times (HR)/2 \times LF = \text{Interceptor size in gallons}$$

Where:

D = number of seats in dining area; NOTE: to the .75 power

GL = gallons of wastewater per meal (normally four gallons)

HR = number of hours the business is open per day (highest)

LF = loading factor (0.5) NOTE: Loading factor shall be one (1.0) where high heat discharge is present as defined previously.

NOTE: Minimum interceptor size shall be 400 gallons. For situations not covered by the preceding formula, a submittal showing the interceptor size and calculations shall be approved by the sanitation authority prior to building official plan approval. For business establishments other than commercial restaurants, a specific submittal shall be approved by the sanitation authority prior to building official plan approval. Such designs shall be prepared by a Nevada Registered Engineer.

2. All grease interceptors shall have a minimum of two compartments with a minimum of three (3) inch diameter fittings designed for grease retention. The fittings shall be installed in the following manner: A 90° long sweep or sanitary tee shall be installed at the inlet, sanitary tee on the inlet side of the interceptor baffle, and a sanitary tee installed at the outlet.
3. There shall be adequate access for cleaning all areas of the separator. A minimum of one access point into each compartment within the separator shall be provided. In addition, no access points shall be further apart than ten (10) feet regardless of the number of compartments. Separator covers shall be of gas-tight construction. Interceptor covers shall have a minimum opening dimension of twenty (20) inches in diameter.
4. All waste shall enter the grease interceptor through the inlet pipe.

5. Grease interceptors shall be so designed that they will not become air bound. Each interceptor shall be properly vented with a relief vent located on the outlet side of the interceptor.
 6. Cleanouts shall be installed in the drainage piping inlet and the outlet side of each grease interceptor.
 7. Each fixture discharging into a grease interceptor shall be individually trapped and vented in an approved manner. An approved type grease interceptor may be used as a fixture trap or a single fixture when the horizontal distance between the fixture outlet and the grease interceptor does not exceed four (4) feet (1.2 m) and the vertical tailpipe or drain between the fixture outlet and the grease interceptor does not exceed two and one-half (2-1/2) feet (0.8 m).
 8. No water jacketed grease trap or grease interceptor shall be approved or installed.
 9. Each grease interceptor shall have an approved water seal of not less than two (2) inches (50.8 mm) in depth or the diameter of its outlet whichever is greater.
 10. When grease interceptors are located in areas of pedestrian or vehicle travel, the design of the interceptor shall be adequate to support the imposed load. Structural calculations to verify its adequacy may be required.
 11. Design standards other than those listed above may be acceptable. Redwood baffles shall not be used for new or existing interceptors. Any alternate design shall be prepared by a Nevada Registered Engineer and submitted for review and approval by the sanitation authority and the building official.
 12. A sample box shall be provided on the outlet side of each grease interceptor down stream of the required cleanout and vent.
- (G) Water Test. A water test shall be applied to the level of the top of the interceptor inlet opening through the outlet opening or discharge side of the sample box. Interceptors shall show no leakage from section seams, pinholes or other imperfections. Any leakage below this level is cause for rejection.

1. Backfill. Interceptors shall not be backfilled until the inspection has been made to verify there are no leaks.

1010 Sand/Oil Interceptors

Delete Section 1010 in its entirety and add a new Section 1010 to read as follows:

1010.0 Sand/Oil Interceptors.

- (A) **Where Required.** An interceptor shall be provided for the proper handling of liquid wastes containing oil (of petroleum origin), said, inert solids, or any other similar substances.

NOTE: A sand/oil interceptor is not intended for the disposal of hazardous waste or as a backup system for accidental spills.

Interceptors as described in these standards shall be installed in, but not limited to, the following locations: car washes, motor vehicle, boat or airplane storage yards, gasoline and diesel service stations, repair garages or any other similar facility which may introduce sand and oil into the sewer system.

Submittal of a written application, describing the exact facility operation and the types and anticipated volumes of waste to be generated, may be required by the building official.

- (B) **Fixtures.** The waste discharge from fixtures and equipment which may contain sand, oil-based wastes, and inert solids shall drain only through an interceptor. This requirement includes, but is not limited to, the following: floor drains, floor sinks, special processing equipment, trench drains, and area drains.
- (C) **Prohibited Fixtures.** The waste line from toilets, urinals, lavatories and other similar fixtures, which discharge domestic wastes only, shall not drain through the interceptor.
- (D) **High Heat Discharge to Separators.** When the temperature of the waste to be drained through a separator exceeds 140°F (60°C), the size of the interceptor shall be doubled. The addition of cold water to the influent of the interceptor is not allowed.

(E) Location.

1. Sand/oil interceptors shall be so installed and connected that they shall be at all times accessible for inspection, cleaning and removal of the intercepted waste.
2. Sand/oil interceptors shall be placed as close as practical to the fixtures served.
3. Sand/oil interceptors shall be located on the exterior of buildings unless specifically approved otherwise in writing by the sanitation authority.
4. Sand/oil interceptors shall be located as to be accessible for service without the use of ladders or removal of bulky equipment.
5. Location of all sand/oil interceptors shall be shown on the approved plans.
6. Each sand/oil interceptor shall serve only one business establishment. Multiple business connections to a single sand/oil interceptor are not permitted unless approved by the sanitation authority in writing.

(F) Size and Design.

1. When separators are located in areas of foot or vehicle traffic, the design of the separator shall be adequate for the imposed load. Structural calculations performed by a Nevada Registered Engineer to verify adequacy may be required.
2. Any private or public wash rack or slab used for cleaning machinery or machine parts shall drain to a sand/oil separator, and shall be adequately protected against storm or surface water intrusion.
3. Design standards other than those listed above may be acceptable. Redwood baffles shall not be used for new or existing interceptors. Any alternate design shall be prepared by a Nevada Registered Engineer and

submitted for review and approval by the sanitation authority and the building official.

4. Cleanouts shall be installed in the drainage piping inlet and outlet side of each sand/oil interceptor.
 5. A sample box shall be provided on the outlet side of the interceptor down stream of the required cleanout and vent.
- (G) Water Test. A water test shall be applied to the level of the top of the interceptor inlet opening through the outlet opening or discharge side of the sample box. Interceptors shall show no leakage from section seams, pinholes or other imperfections. Any leakage below this level is cause for rejection.
1. Backfill. Interceptors shall not be backfilled with the inspection has been made to verify there are no leaks.

1011 Maintenance of Interceptors

Delete Section 1011.0 in its entirety and add a new Section 1011 to read as follows:

1011.0 Maintenance of Interceptors.

- (A) Grease and sand/oil interceptors shall be maintained in efficient operating condition by periodic removal of the accumulated grease or sand/oil. No such collected grease, sand/oil, or any material collected from the interceptor shall be introduced into any drainage piping, public or private sewers. The materials removed from interceptors shall be handled and disposed of in a proper manner in accordance with published health district and sanitation authority requirements. Illegal dumping of waste into the sewer shall not be allowed.
- (B) Maintenance records for each installed interceptor shall be maintained on the premises at all times and presented to a duly authorized agent of the sanitation district upon request.

- (C) The enforcement of the interceptor maintenance requirements shall be the responsibility of the sanitation district.

1014 Abandoned Interceptors

Delete Section 1014. in its entirety and add a new Section 1014 to read as follows:

- 1014.0 Abandoned Interceptors. Abandoned interceptors shall be cleaned and filled as required by Section 722.0 of the Plumbing Code for abandoned sewers and sewage disposal facilities.

1016 Interceptor Requirements for Existing Buildings.

Delete Section 1016.0 in its entirety and add a new Section 1016.0 to read as follows:

- 1016.0 If no interceptor is presently installed in a building for which a business requiring an interceptor is proposed, then one or more interceptors and building fixtures shall be installed in the building to meet these standards.

Before any existing business, which has a complying or non-complying interceptor, increases the size of its business, its load on the interceptor, or is transferred in ownership, the building fixtures and interceptor shall be brought into compliance with these standards as if for new construction.

1017 Oil and Flammable Liquids Interceptors (Deleted)

Delete Section 1017 in its entirety.

1101.3 Materials.

Delete Section 1101.3 in its entirety and add a new Section 1101.3 to read as follows:

- 1101.3 Plastic piping used for rainwater systems shall be limited to buildings defined as combustible construction by this code.

1101.5.1 Subsoil Drains

Amend the first sentence of Section 1101.5.1 to read as follows:

Where required by the geotechnical engineer or the building official, subsoil drains shall be provided around the perimeter of buildings having basements, cellars, or crawl spaces or floors below grade.

1101.9 Filling Stations and Motor Vehicle Washing Establishments. (Deleted)

Delete Section 1101.9 in its entirety.

1101.10 Paved Areas (Deleted)

Delete Section 1101.10 in its entirety.

1103 Traps on Storm Drains and Leaders (Deleted)

Delete Section 1103 in its entirety.

1104.3 Combining Storm with Sanitary Drainage (Deleted)

Delete Section 1104.3 in its entirety.

1209.7 Gas Meter Locations (Added)

Add a new section 1209.7 to read as follows:

1209.7 All lots in mobile home parks and lots in recreational vehicle parks shall be served individually by the duly franchised gas serving utility supplying gas from the street main.

1211.4 Installation of Gas Piping

Add a new sentence to the end of the first paragraph of Section 1211.4 to read as follows:

All gas piping under a slab shall be capable of being removed and replaced.

1211.7 Gas Isolation Fittings (Deleted)

Delete Section 1211.7 in its entirety.

1213.5 and 1213.6 Liquid Petroleum Gas Facilities and Piping (Deleted)

Delete Sections 1213.5 and 1213.6 in their entirety. See LPG State Regulations.

Chapter 13 Medical Gas Systems

Delete Chapter 13 in its entirety.

Chapter 15 Firestop Protection for DWV and Stormwater Applications

Delete Chapter 15 in its entirety.

Appendix G - Graywater Systems and Appendix H – Interceptors

Delete Appendix G and Appendix H in their entirety.

Appendix J1 Reclaimed Water Systems – General

Amend Appendix J1 paragraph (a) to read as follows:

- (a) The provisions of the appendix shall apply to the installation, construction, alteration, and repair of reclaimed water systems intended to supply water closets, urinals, and trap primers for floor drains and floor sinks and collect gray water for other authorized systems by the authority having jurisdiction. Use is limited to these fixtures that are located in non-residential buildings. Fixtures within residential buildings are excluded from the list of approved uses. The reclaimed water systems shall have no connection to any potable water system, with or without mechanical backflow prevention devices. If reclaimed water is utilized on the premises, all potable water supplies shall be provided with appropriate backflow protection, as required by the authority having jurisdiction. Except as otherwise provided for in this

appendix, the provisions of this Code shall be applicable to reclaimed water system installations.

Appendix J2 Definitions

Amend Appendix J2 to read as follows:

Reclaimed water is water which, as a result of tertiary treatment of domestic wastewater by a public agency, is suitable for a direct beneficial use or a controlled use that would not otherwise occur. The level of treatment and quality of the reclaimed water shall be approved by the State of Nevada Department of Environmental Protection.

Appendix J10 Approved Uses of Reclaimed Water

Amend Appendix J10 to read as follows:

Use of reclaimed water shall require approval of the authority having jurisdiction and the officials designated by the State of Nevada Department of Environmental Protection.

Appendix K Private Sewage Disposal Systems (Deleted)

Delete Appendix K in its entirety.

Appendix L6.0 Special Venting of Fixtures (Deleted)

Delete Appendix L6.0 in its entirety.

BILL NO. 2002-106

ORDINANCE NO. _____

AN ORDINANCE TO ADOPT THE 2000 EDITION OF THE UNIFORM PLUMBING CODE, TOGETHER WITH AMENDMENTS THERETO, AND TO PROVIDE FOR OTHER RELATED MATTERS.

Proposed by: Paul K. Wilkins,
Director of Building and Safety

Summary: Adopts the 2000 Edition of the Uniform Plumbing Code, together with amendments thereto, as the City's Plumbing Code.

THE CITY COUNCIL OF THE CITY OF LAS VEGAS DOES HEREBY ORDAIN
AS FOLLOWS:

SECTION 1: Title 16, Chapter 28, Section 10, of the Municipal Code of the City of Las Vegas, Nevada, 1983 Edition, is hereby amended to read as follows:

16.28.010: Those certain documents, three copies of each being on file in the Office of the City Clerk, and designated as follows, are adopted by reference and made a part of this Code, to the same effect as if set out herein in full:

(A) Uniform Plumbing Code, [1997] 2000 Edition, including its Standards and Appendices, except as otherwise indicated, designated as Part 1 of this Chapter;

(B) A document entitled ["1997 Southern Nevada Plumbing Code Amendments, as modified herein,"] "Southern Nevada 2000 Plumbing Code Amendments," adding to, deleting from and amending the Uniform Plumbing Code, [1997] 2000 Edition, designated as Part 2 of this Chapter.

SECTION 2: Section 313.5 of the Uniform Plumbing Code, 2000 Edition, is amended by adding thereto a new sentence, reading as follows:

All copper water piping under the slab must be sleeved.

SECTION 3: The Uniform Plumbing Code, 1997 Edition, and the 1997 Southern Nevada Plumbing Code Amendments are hereby repealed in their entirety.

SECTION 4: If any section, subsection, subdivision, paragraph, sentence, clause or phrase in this ordinance or any part thereof, is for any reason held to be unconstitutional, or invalid or ineffective by any court of competent jurisdiction, such decision shall not affect the validity or effectiveness of the remaining portions of this ordinance or any part thereof. The City Council of the

1 City of Las Vegas hereby declares that it would have passed each section, subsection, subdivision,
2 paragraph, sentence, clause or phrase thereof irrespective of the fact that any one or more sections,
3 subsections, subdivisions, paragraphs, sentences, clauses or phrases be declared unconstitutional,
4 invalid or ineffective.

5 SECTION 5: Whenever in this ordinance any act is prohibited or is made or declared
6 to be unlawful or an offense or a misdemeanor, or whenever in this ordinance the doing of any act is
7 required or the failure to do any act is made or declared to be unlawful or an offense or a
8 misdemeanor, the doing of such prohibited act or the failure to do any such required act shall
9 constitute a misdemeanor and upon conviction thereof, shall be punished by a fine of not more than
10 \$1,000.00 or by imprisonment for a term of not more than six months, or by any combination of such
11 fine and imprisonment. Any day of any violation of this ordinance shall constitute a separate offense.

12 SECTION 6: All ordinances or parts of ordinances or sections, subsections, phrases,
13 sentences, clauses or paragraphs contained in the Municipal Code of the City of Las Vegas, Nevada,
14 1983 Edition, in conflict herewith are hereby repealed.

15 PASSED, ADOPTED and APPROVED this ____ day of _____, 2002.

16 APPROVED:

17
18 By OSCAR B. GOODMAN, Mayor

19 ATTEST:

20
21 BARBARA JO RONEMUS, City Clerk

22 APPROVED AS TO FORM:

23 Val Stead 9-14-02
24 Date

1 The above and foregoing ordinance was first proposed and read by title to the City Council on the
2 ____ day of _____, 2002, and referred to the following committee composed of
3 _____ and _____ for recommendation;
4 thereafter the said committee reported favorably on said ordinance on the ____ day of
5 _____, 2002, which was a _____ meeting of said Council; that at said
6 _____ meeting, the proposed ordinance was read by title to the City Council
7 as first introduced and adopted by the following vote:

8 VOTING "AYE": _____

9 VOTING "NAY": _____

10 ABSENT: _____

11

12 APPROVED:

13

14 By _____
OSCAR B. GOODMAN, Mayor

15 ATTEST:

16

17 BARBARA JO RONEMUS, City Clerk

18

19

20

21

22

23

24

25

26

27

28

**SOUTHERN NEVADA 2000
PLUMBING CODE AMENDMENTS**

PREFACE

This document comprises the Plumbing Code Amendments to the 2000 Uniform Mechanical Code as published by the International Association of Plumbing and Mechanical Officials. It was developed by the City of Las Vegas to be adopted by reference. These provisions are not code unless adopted and codified by governmental jurisdictions. These amendments are not intended to prevent the use of any material or method of construction not specifically prescribed herein, provided any alternate has been approved and its use authorized by the building official. This document is available to be adopted as code by any jurisdiction without permission or approval from the City of Las Vegas.

TABLE OF CONTENTS

Preface

Chapter 1 Administration

205	Combustible Construction
311.4	Single Stack Drainage Waste and Vent Systems
318.4	Test Requirements (Food Handling Establishments)
402.10	Timing Devices
413	Minimum Number of Require Fixtures (Deleted)
	Table 4-1 Minimum Plumbing Facilities (Deleted)
517.3	Venting Requirements – Type B
604.1	Materials
608.5	Relief Valves
609.10.1	Air Chambers
	Table 6-6 Air Chambers (Deleted)
701.1.2	Materials
704.3	Fixture Connections (Drainage)
707.11	Cleanouts
710.1	Drainage of Fixtures Located Below the Next Upstream Manhole or Below the Main Sewer Level
801.2.2	Food and Beverage Handling Establishments
801.2.4	Floor Sinks
804.1	Indirect Waste Receptors
815	Condensate Waste and Control (Deleted)
903.1.2	Materials
1009	Interceptors
1010	Sand/Oil Interceptors
1011	Maintenance of Interceptors
1014	Abandoned Interceptors
1016	Interceptor Requirements for Existing Buildings
1017	Oil & Flammable Liquids Interceptors (Deleted)
1101.3	Materials
1101.5.1	Subsoil Drains
1101.1	Paved areas (Deleted)
1101.9	Filling Stations and Motor Vehicle Washing Establishments (Deleted)
1101.10	Paved Areas (Deleted)
1103	Traps on Storm Drains and Leaders (Deleted)
1104.3	Combining Storm with Sanitary Drainage (Deleted)
1209.7	Gas Meter Locations (Added)
1211.4	Installation of Gas Piping
1211.7	Gas Isolation Fittings (Deleted)
1213.5	and 1213.6 Liquid Petroleum Gas Facilities and piping (Deleted)

Chapter 13 Medical Gas Systems (Deleted)

**Chapter 15 Firestop Protection for DWV and
Stormwater Applications (Deleted)**

**Appendixes G and H
Gray Water Systems and Interceptors (Deleted)**

**Appendix J1
Reclaimed Water Systems**

**Appendix J2
Definitions**

**Appendix J10
Approved Uses of Reclaimed Water**

**Appendix K
Private Sewage Disposal Systems (Deleted)**

**Appendix L
Alternate Plumbing Systems**

Index of Amendments for Plumbing Code Committee

Section Number	Title	Amendment #	Flagged Items
Chapter One	Administration	1	
103.1.3	Licensing	2	*
205	Definitions: Combustible Construction	3	
311.4	Single Stack Drainage Waste & Vent System	4	
318.4	Test Requirements (Food Handling Establishments)	5	*
402.10	Timing Devices	6	
413	Minimum Number of Required Fixtures (Deleted)	7	
Table 4-1	Minimum Plumbing Facilities (Deleted)	8	
517.3	Venting Requirements – Type B	9	
604.1	Materials	10	
608.5	Relief Valves	11	
609.10.1	Air Chambers		
Table 6-6	Minimum Require Air Chamber Dimensions		
701.1.2	Materials		
704.3	Fixture Connections		
707.11	Cleanouts		
710.1	Drainage of Fixtures Located Below the Next . . .		
801.2.2	Food & Beverage Handling Establishments		
801.2.4	Floor Sinks		
804.1	Indirect Waste Receptors		
815	Condensate Waste and Control (Deleted)		
903.1.2	Materials		
1009	Interceptors		
1010	Sand/Oil Interceptors		
1011	Maintenance of Interceptors		
1014	Abandoned Interceptors		
1016	Interceptor Requirements for Existing Buildings		*
1017	Oil & Flammable Liquids Interceptors (Deleted)		
1101.3	Materials		

1101.5.1	Subsoil Drains		
1101.9	Filling Stations & Motor Vehicle Washing Establishments (Deleted)		
1101.10	Paved Areas (Deleted)		
1103	Traps on Storm Drains & Leaders (Deleted)		
1104.3	Combining Storm with Sanitary Drainage (Deleted)		
1209.7	Gas Meter Locations		
1211	Installation of Gas Piping		
1211.7	Gas Isolation Fittings (Deleted)		
1213.5 – 1213.6	Liquid Petroleum Gas Facilities & Piping (Deleted)		
Chapter 13	Medical Gas Systems		
Chapter 15	Firestop Protection for DWV & Stormwater Applic.		
Appendix G	Gray Water Systems (Deleted)		
Appendix H	Interceptors (Deleted)		
Appendix J1	Reclaimed Water Systems		
Appendix J2	Definitions		
Appendix J10	Approved Uses of Reclaimed Water		
Appendix K	Private Disposal Systems (Deleted)		
Appendix L	Special Venting of Fixtures		

CHAPTER 1 ADMINISTRATION

Chapter 1 – Administration is deleted in its entirety and replaced with the following.

103.1.3

PLUMBING LICENSING PROVISION: It shall be the responsibility of every individual and every contractor to provide quality supervision while performing plumbing installations in the City of Las Vegas. The minimum job site requirements for an individual leading or direction the installation shall be of a Southern Nevada licensed journeyman plumber.

A minimum of a journeyman plumbing license, issued in Clark County, shall be provided to any code official by the lead plumbing individual at the jobsite where inspection of the work by the code official is determined not to meet minimum code requirements.

205C

Add a new definition to Section 205 to be placed in alphabetical order and to read as follows:

Combustible Construction – Combustible construction shall mean work within any building or structure classified as Type III-A Type III-B; Type IV – Heavy Timber; Type V-A or Type V-B as defined in the Building Code.

311.4 Single Stack Drainage Waste and Vent Systems

Amend Section 311.4 by deleting the second sentence and adding a new exception to read as follows:

311.4 Except as hereinafter provided in Sections 908.0, 909.0 and 910.0, no vent pipe shall be used as a soil or waste pipe, nor shall any soil or waste pipe be used as a vent.

Exception: Single stack DWV systems may be used provided they are designed by a Nevada Registered Mechanical Engineer and approved by the building official.

318.4 Test Requirements (Food Handling Establishments)

Amend Section 318.4 by deleting twenty-five (25) feet and replacing it with ten (10) feet.

318.4 Soil and drain pipes located above such areas shall be subjected to a standing water test of not less than ten (10) feet (3048 mm).

402.10 Timing Devices

Add a new Subsection 402.10 to read as follows:

402.10 A toilet or urinal which employs a timing device or other mechanism to flush periodically or which continually flushes shall not be installed.

413 Minimum Number of Required Fixtures (Deleted)

Delete Section 413 in its entirety. (Refer to the Building Code for number of fixture requirements.)

Table 4-1 Minimum Plumbing Facilities (Deleted)

Delete Table 4-1 in its entirety. (Note: Refer to the Building Code for minimum plumbing facility requirements.)

517.3 Venting Requirements – Type B

Amend Section 517.3 to read as follows:

Type B. Type B gas vents with listed vent caps twelve (12) inches (305 mm) in size or smaller shall be permitted to be terminated in accordance with Table 5-3, provided they are located at least four (4) feet (1219 mm) from a vertical wall or similar obstruction. All other Type B gas Vents shall terminate not less than two (2) feet (610 mm) above the highest point where they pass through the roof and at least two (2) feet (610 mm) higher than any portion of a building within (10) feet (3048 mm).

604.1 Materials

Add a new sentence to the end of Section 604.1 to read as follows:

604.1 Water distribution pipe, building supply water pipe and fittings shall be of brass, copper, cast iron, galvanized malleable iron, galvanized wrought iron, galvanized steel, or other approved

materials Asbestos-cement, CPVC, PE, PVC or PEX water pipe manufactured to recognized standards may be used for cold water distribution systems outside a building. CPVC, PEX water pipe, tubing and fittings, manufactured to recognized standards may be used for hot and cold water distribution systems within a building. All materials used in the water supply system, except valves and similar devices shall be of a like material, except where otherwise approved by the Administrative Authority. Plastic piping shall be limited to buildings defined as combustible construction by this code.

608.5 Relief Valves

Amend Section 608.5 to read as follows:

608.5 Relief valves located inside a building shall be provided with a drain, not smaller than the relief valve outlet, of galvanized steel, hard drawn copper piping and fittings, CPVC, flexible corrugated connectors complying with 604.12, or listed relief valve drain tube with fittings which shall not reduce the internal bore of the piping or tubing (straight lengths as opposed to coils) and shall extend from the valve to the outside of the building with the end of the pipe not more than two (2) feet (610 mm) nor less than six (6) inches (152 mm) above the ground or the flood level of the area receiving the discharge and pointing downward. Such drains may terminate at other approved locations. No part of such drain pipe shall be trapped or subject to freezing. The terminal end of the drain pipe shall not be threaded.

609.10.1 Air Chambers

Amend Section 609.10.1 to read as follows:

609.10.1 When air chambers are installed, each air chamber shall be provided with acceptable means for restoring the air in the event that the chamber becomes waterlogged.

Table 6-6 Minimum Required Air Chamber Dimensions

Delete Table 6-6 in its entirety.

701.1.2 Materials

Delete Section 701.1.2 in its entirety and add a new Section 701.1.2 to read as follows:

- 701.1.2 Plastic piping used for drainage waste and vent systems shall be limited to buildings defined as combustible construction by this code.

704.3 Fixture Connections

Amend Section 704.3 to read as follows:

- 704.3 Pot sinks, scullery sinks, dishwashing sinks, silverware sinks, commercial dishwashing machines, and other similar fixtures shall be indirectly connected to the drainage systems by means of an air gap.

707.11 Cleanouts

Add an exception to the end of Section 707.11 to read as follows:

- 707.11 Cleanout fittings shall not be less in size than those given in Table 7-6.

Exception: Where a 2-1/2" (inch) cleanout is required, a 2" (inch) cleanout may be used for horizontal branch waste lines in single-family dwellings.

710.1 Drainage of Fixtures Located Below the Next Upstream Manhole or Below the Main Sewer Level

Section 710.1 is amended to read as follows:

- 710.1 Drainage piping serving fixtures which have flood level rims located below the elevation of the next upstream manhole cover of the public or private sewer serving such drainage piping shall be protected from backflow of sewage by installing an approved type backwater valve. Other than single family dwellings, fixtures above such elevation shall not discharge through the backwater valve.

801.2.2 Food and Beverage Handling Establishments

Delete "or airbreak" from the fifth sentence of Section 801.2.2.

801.2.2 For walk-in coolers, floor drains may be connected to a separate drainage line discharging into an outside receptor. The flood level rim of the receptor shall be a minimum of six (6) inches (152 mm) lower than the lowest floor drain. Such floor drains shall be trapped and individually vented. Cleanouts shall be provided at every ninety (90) degree (1.6 rad) turn and shall be accessibly located. Such waste shall discharge through an airgap into a trapped and vented receptor, except that full-size airgap is required where the indirect waste pipe may be under vacuum.

801.2.4 Floor Sinks

Add a new Section 801.2.4 to read as follows:

801.2.4 Floor Sinks. Floor sinks shall be installed flush with the finished floor and shall be accessible for cleaning.

804.1 Indirect Waste Receptors

Add a second paragraph to Section 804.1 to read as follows:

When any discharge piping other than the discharge from the wash machine is terminated into the washer box, a second port washer box shall be used. The second port shall be permanently connected to the vertical receptor standpipe via a wye branch fitting at the time of rough plumbing. The wash machine shall discharge by an airbreak into the most vertical or primary receptor standpipe. All other discharge piping shall discharge into the second port via the following terminations: i.e. Water softener-airbreak; T&P-airgap; Condensate-airbreak. The T&P discharge shall be taken to the exterior of the building unless structural conditions or manufacturers listed distances prevent this termination. Temperature and pressure relief lines may terminate to the following fixtures located in normally unoccupied areas: floor sink, or a floor drain.

815 Condensate Waste and Control (Deleted)

Delete Section 815 in its entirety. (Note: Refer to the Mechanical Code for air conditioning equipment requirements.) The deleted Sections (which include their Subsections) are as follows: 815.0, 815.1, 815.2, 815.3 and its Subsections.

903.1.2 Materials

Delete Section 903.1.2 in its entirety and add a new Section 903.1.2 to read as follows:

- 903.1.2 Plastic piping used for drainage waste and vent systems shall be limited to buildings defined as combustible construction by this code.

1009 Interceptors

Delete Section 1009 in its entirety and add a new Section 1009 to read as follows:

1009.0 Grease Interceptors

- (A) General. A grease interceptor shall be provided for proper handling of liquid wastes containing grease. A grease interceptor as described in these standards shall be installed in any business establishment with kitchen facilities including restaurants, cafes, lunch counters, cafeterias, supermarkets, convenience stores, bakeries, bars and clubs, hotels, hospitals, sanitariums, factory or school kitchens, or any other commercial establishment where grease may be introduced into the sewer system.

Special consideration shall be given to every fish, fowl and animal slaughterhouse or establishment; every fish, fowl and meat packing or curing establishment; every soap factory, tallow rendering, fat rendering and hide curing establishment; or any other establishment from which considerable amounts of grease are likely to be discharged into the sewer system. Written application describing exact operation and anticipated volumes of grease shall be made to the sanitation authority to determine the standards for such systems.

- (B) Fixtures. The waste discharge from fixtures and equipment which may contain grease from the businesses set out previously shall be drained through a grease interceptor or grease interceptors. Fixtures such as, but not limited to, the following are included: scullery sinks, pot and pan sinks, dishwashing machines, soup kettles and similar cooking

equipment, trash compactors, floor drains in grease generating areas, and trash can wash areas.

- (C) Prohibited fixtures. The waste lines from toilets, urinals, and other similar fixtures shall not drain through a grease interceptor.
- (D) High heat discharge. When the temperature of any waste discharge is in excess of 140°F (60°C) and drains through a grease interceptor, the size of the interceptor shall be doubled. The addition of cold water to the influent of the interceptor is not allowed.
- (E) Location.
 - 1. Grease interceptors shall be so installed and connected that they shall be at all times easily accessible for inspection, cleaning and removal of the intercepted grease.
 - 2. Grease interceptors shall be placed as close as practical to the fixtures served.
 - 3. Grease interceptors shall be located on the exterior of buildings unless specifically approved otherwise in writing by the health district.
 - 4. Grease interceptors shall be so located as to be accessible for service without the use of ladders or the removal of bulky equipment.
 - 5. Location of all grease interceptors shall be shown on the approved plans.
 - 6. Each grease interceptor shall serve only one business establishment. Multiple business connections to a single receptor are not permitted, unless approved by the sanitation in writing.

(F) Size

- 1. Grease interceptors shall be sized in accordance with the following formula based on wastewater flow:
$$D^{.75} \times (GL) \times (HR)/2 \times LF = \text{Interceptor size in gallons}$$

Where:

D = number of seats in dining area; NOTE: to the .75 power

GL = gallons of wastewater per meal (normally four gallons)
HR = number of hours the business is open per day (highest)
LF = loading factor (0.5) NOTE: Loading factor shall be one (1.0)
where high heat discharge is present as defined previously.

NOTE: Minimum interceptor size shall be 400 gallons. For situations not covered by the preceding formula, a submittal showing the interceptor size and calculations shall be approved by the sanitation authority prior to building official plan approval. For business establishments other than commercial restaurants, a specific submittal shall be approved by the sanitation authority prior to building official plan approval. Such designs shall be prepared by a Nevada Registered Engineer.

2. All grease interceptors shall have a minimum of two compartments with a minimum of three (3) inch diameter fittings designed for grease retention. The fittings shall be installed in the following manner: A 90° long sweep or sanitary tee shall be installed at the inlet, sanitary tee on the inlet side of the interceptor baffle, and a sanitary tee installed at the outlet.
3. There shall be adequate access for cleaning all areas of the separator. A minimum of one access point into each compartment within the separator shall be provided. In addition, no access points shall be further apart than ten (10) feet regardless of the number of compartments. Separator covers shall be of gas-tight construction. Interceptor covers shall have a minimum opening dimension of twenty (20) inches in diameter.
4. All waste shall enter the grease interceptor through the inlet pipe.
5. Grease interceptors shall be so designed that they will not become air bound. Each interceptor shall be properly vented with a relief vent located on the outlet side of the interceptor.
6. Cleanouts shall be installed in the drainage piping inlet and the outlet side of each grease interceptor.
7. Each fixture discharging into a grease interceptor shall be individually trapped and vented in an approved manner. An approved type grease interceptor may be used as a fixture

trap or a single fixture when the horizontal distance between the fixture outlet and the grease interceptor does not exceed four (4) feet (1.2 m) and the vertical tailpipe or drain between the fixture outlet and the grease interceptor does not exceed two and one-half (2-1/2) feet (0.8 m).

8. No water jacketed grease trap or grease interceptor shall be approved or installed.
 9. Each grease interceptor shall have an approved water seal of not less than two (2) inches (50.8 mm) in depth or the diameter of its outlet whichever is greater.
 10. When grease interceptors are located in areas of pedestrian or vehicle travel, the design of the interceptor shall be adequate to support the imposed load. Structural calculations to verify its adequacy may be required.
 11. Design standards other than those listed above may be acceptable. Redwood baffles shall not be used for new or existing interceptors. Any alternate design shall be prepared by a Nevada Registered Engineer and submitted for review and approval by the sanitation authority and the building official.
 12. A sample box shall be provided on the outlet side of each grease interceptor down stream of the required cleanout and vent.
- (G) Water Test. A water test shall be applied to the level of the top of the interceptor inlet opening through the outlet opening or discharge side of the sample box. Interceptors shall show no leakage from section seams, pinholes or other imperfections. Any leakage below this level is cause for rejection.
1. Backfill. Interceptors shall not be backfilled until the inspection has been made to verify there are no leaks.

1010 Sand/Oil Interceptors

Delete Section 1010 in its entirety and add a new Section 1010 to read as follows:

1010.0 Sand/Oil Interceptors.

- (A) **Where Required.** An interceptor shall be provided for the proper handling of liquid wastes containing oil (of petroleum origin), said, inert solids, or any other similar substances.

NOTE: A sand/oil interceptor is not intended for the disposal of hazardous waste or as a backup system for accidental spills.

Interceptors as described in these standards shall be installed in, but not limited to, the following locations: car washes, motor vehicle, boat or airplane storage yards, gasoline and diesel service stations, repair garages or any other similar facility which may introduce sand and oil into the sewer system.

Submittal of a written application, describing the exact facility operation and the types and anticipated volumes of waste to be generated, may be required by the building official.

- (B) **Fixtures.** The waste discharge from fixtures and equipment which may contain sand, oil-based wastes, and inert solids shall drain only through an interceptor. This requirement includes, but is not limited to, the following: floor drains, floor sinks, special processing equipment, trench drains, and area drains.
- (C) **Prohibited Fixtures.** The waste line from toilets, urinals, lavatories and other similar fixtures, which discharge domestic wastes only, shall not drain through the interceptor.
- (D) **High Heat Discharge to Separators.** When the temperature of the waste to be drained through a separator exceeds 140°F (60°C), the size of the interceptor shall be doubled. The addition of cold water to the influent of the interceptor is not allowed.
- (E) **Location.**
1. Sand/oil interceptors shall be so installed and connected that they shall be at all times accessible for inspection, cleaning and removal of the intercepted waste.
 2. Sand/oil interceptors shall be placed as close as practical to the fixtures served.

3. Sand/oil interceptors shall be located on the exterior of buildings unless specifically approved otherwise in writing by the sanitation authority.
4. Sand/oil interceptors shall be located as to be accessible for service without the use of ladders or removal of bulky equipment.
5. Location of all sand/oil interceptors shall be shown on the approved plans.
6. Each sand/oil interceptor shall serve only one business establishment. Multiple business connections to a single sand/oil interceptor are not permitted unless approved by the sanitation authority in writing.

(F) Size and Design.

1. When separators are located in areas of foot or vehicle traffic, the design of the separator shall be adequate for the imposed load. Structural calculations performed by a Nevada Registered Engineer to verify adequacy may be required.
2. Any private or public wash rack or slab used for cleaning machinery or machine parts shall drain to a sand/oil separator, and shall be adequately protected against storm or surface water intrusion.
3. Design standards other than those listed above may be acceptable. Redwood baffles shall not be used for new or existing interceptors. Any alternate design shall be prepared by a Nevada Registered Engineer and submitted for review and approval by the sanitation authority and the building official.
4. Cleanouts shall be installed in the drainage piping inlet and outlet side of each sand/oil interceptor.
5. A sample box shall be provided on the outlet side of the interceptor down stream of the required cleanout and vent.

- (G) Water Test. A water test shall be applied to the level of the top of the interceptor inlet opening through the outlet opening or discharge side of the sample box. Interceptors shall show no leakage from section seams, pinholes or other imperfections. Any leakage below this level is cause for rejection.
- 1. Backfill. Interceptors shall not be backfilled with the inspection has been made to verify there are no leaks.

1011 Maintenance of Interceptors

Delete Section 1011.0 in its entirety and add a new Section 1011 to read as follows:

1011.0 Maintenance of Interceptors.

- (A) Grease and sand/oil interceptors shall be maintained in efficient operating condition by periodic removal of the accumulated grease or sand/oil. No such collected grease, sand/oil, or any material collected from the interceptor shall be introduced into any drainage piping, public or private sewers. The materials removed from interceptors shall be handled and disposed of in a proper manner in accordance with published health district and sanitation authority requirements. Illegal dumping of waste into the sewer shall not be allowed.
- (B) Maintenance records for each installed interceptor shall be maintained on the premises at all times and presented to a duly authorized agent of the sanitation district upon request.
- (C) The enforcement of the interceptor maintenance requirements shall be the responsibility of the sanitation district.

1014 Abandoned Interceptors

Delete Section 1014. in its entirety and add a new Section 1014 to read as follows:

1014.0 Abandoned Interceptors. Abandoned interceptors shall be cleaned and filled as required by Section 722.0 of the

Plumbing Code for abandoned sewers and sewage disposal facilities.

1016 Interceptor Requirements for Existing Buildings.

Delete Section 1016.0 in its entirety and add a new Section 1016.0 to read as follows:

1016.0 If no interceptor is presently installed in a building for which a business requiring an interceptor is proposed, then one or more interceptors and building fixtures shall be installed in the building to meet these standards.

Before any existing business, which has a complying or non-complying interceptor, increases the size of its business, its load on the interceptor, or is transferred in ownership, the building fixtures and interceptor shall be brought into compliance with these standards as if for new construction.

1017 Oil and Flammable Liquids Interceptors (Deleted)

Delete Section 1017 in its entirety.

1101.3 Materials.

Delete Section 1101.3 in its entirety and add a new Section 1101.3 to read as follows:

1101.3 Plastic piping used for rainwater systems shall be limited to buildings defined as combustible construction by this code.

1101.5.1 Subsoil Drains

Amend the first sentence of Section 1101.5.1 to read as follows:

Where required by the geotechnical engineer or the building official, subsoil drains shall be provided around the perimeter of buildings having basements, cellars, or crawl spaces or floors below grade.

**1101.9 Filling Stations and Motor Vehicle Washing Establishments.
(Deleted)**

Delete Section 1101.9 in its entirety.

1101.10 Paved Areas (Deleted)

Delete Section 1101.10 in its entirety.

1103 Traps on Storm Drains and Leaders (Deleted)

Delete Section 1103 in its entirety.

1104.3 Combining Storm with Sanitary Drainage (Deleted)

Delete Section 1104.3 in its entirety.

1209.7 Gas Meter Locations (Added)

Add a new section 1209.7 to read as follows:

1209.7 All lots in mobile home parks and lots in recreational vehicle parks shall be served individually by the duly franchised gas serving utility supplying gas from the street main.

1211.4 Installation of Gas Piping

Add a new sentence to the end of the first paragraph of Section 1211.4 to read as follows:

All gas piping under a slab shall be capable of being removed and replaced.

1211.7 Gas Isolation Fittings (Deleted)

Delete Section 1211.7 in its entirety.

1213.5 and 1213.6 Liquid Petroleum Gas Facilities and Piping (Deleted)

Delete Sections 1213.5 and 1213.6 in their entirety. See LPG State Regulations.

Chapter 13 Medical Gas Systems

Delete Chapter 13 in its entirety.

Chapter 15 Firestop Protection for DWV and Stormwater Applications

Delete Chapter 15 in its entirety.

Appendix G - Graywater Systems and Appendix H – Interceptors

Delete Appendix G and Appendix H in their entirety.

Appendix J1 Reclaimed Water Systems – General

Amend Appendix J1 paragraph (a) to read as follows:

- (a) The provisions of the appendix shall apply to the installation, construction, alteration, and repair of reclaimed water systems intended to supply water closets, urinals, and trap primers for floor drains and floor sinks and collect gray water for other authorized systems by the authority having jurisdiction. Use is limited to these fixtures that are located in non-residential buildings. Fixtures within residential buildings are excluded from the list of approved uses. The reclaimed water systems shall have no connection to any potable water system, with or without mechanical backflow prevention devices. If reclaimed water is utilized on the premises, all potable water supplies shall be provided with appropriate backflow protection, as required by the authority having jurisdiction. Except as otherwise provided for in this appendix, the provisions of this Code shall be applicable to reclaimed water system installations.

Appendix J2 Definitions

Amend Appendix J2 to read as follows:

Reclaimed water is water which, as a result of tertiary treatment of domestic wastewater by a public agency, is suitable for a direct beneficial use or a controlled use that would not otherwise occur. The level of

treatment and quality of the reclaimed water shall be approved by the State of Nevada Department of Environmental Protection.

Appendix J10 Approved Uses of Reclaimed Water

Amend Appendix J10 to read as follows:

Use of reclaimed water shall require approval of the authority having jurisdiction and the officials designated by the State of Nevada Department of Environmental Protection.

Appendix K Private Sewage Disposal Systems (Deleted)

Delete Appendix K in its entirety.

Appendix L6.0 Special Venting of Fixtures (Deleted)

Delete Appendix L6.0 in its entirety.

RECEIVED
CITY CLERK

2002 OCT 29 A 11: 55

AFFP DISTRICT COURT
Clark County, Nevada

AFFIDAVIT OF PUBLICATION

STATE OF NEVADA)
COUNTY OF CLARK) SS:

Donna Stark, being 1st duly sworn, deposes and says:

That she is the Legal Clerk for the Las Vegas Review-Journal and the Las Vegas Sun, daily newspapers regularly issued, published and circulated in the City of Las Vegas, County of Clark, State of Nevada, and that the advertisement, a true copy attached for,

LV CITY CLERK
2465876

2296311LV

was continuously published in said Las Vegas Review Journal and/or Las Vegas Sun in 1 edition(s) of said newspaper issued from 10/24/2002 to 10/24/2002, on the following days: OCT. 24, 2002

Signed: _____

Donna Stark

SUBSCRIBED AND SWORN BEFORE ME THIS THE _____

25

day of _____ 2002

October

Mary B. Sheffield

Notary Public

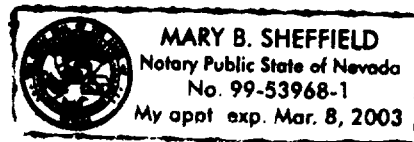
FIRST AMENDMENT
BILL NO. 2002-106

AN ORDINANCE TO ADOPT THE 2000 EDITION OF THE UNIFORM PLUMBING CODE, TOGETHER WITH AMENDMENTS THERETO, AND TO PROVIDE FOR OTHER RELATED MATTERS.

Proposed by: Paul K. Wilkins, Director of Building and Safety
Summary: Adopts the 2000 Edition of the Uniform Plumbing Code, together with amendments thereto, as the City's Plumbing Code.

At the City Council meeting of OCTOBER 2, 2002
BILL NO. 2002-106 WAS READ BY TITLE AND REFERRED TO A RECOMMENDING COMMITTEE

COPIES OF THE COMPLETE ORDINANCE ARE AVAILABLE FOR PUBLIC INFORMATION IN THE OFFICE OF THE CITY CLERK, 1ST FLOOR, 400 STEWART AVENUE, LAS VEGAS, NEVADA.
SUB: October 24, 2002
V Review-Journal



RECEIVED
CITY CLERK

2002 NOV 15 P 12:31

AFFP DISTRICT COURT
Clark County, Nevada

AFFIDAVIT OF PUBLICATION

STATE OF NEVADA)
COUNTY OF CLARK) SS:

Donna Stark, being 1st duly sworn, deposes and says:

That she is the Legal Clerk for the Las Vegas Review-Journal and the Las Vegas Sun, daily newspapers regularly issued, published and circulated in the City of Las Vegas, County of Clark, State of Nevada, and that the advertisement, a true copy attached for,

LV CITY CLERK
2493365

2296311LV

was continuously published in said Las Vegas Review Journal and/or Las Vegas Sun in 1 edition(s) of said newspaper issued from 11/09/2002 to 11/09/2002, on the following days: NOV. 9, 2002

SECOND AMENDMENT
BLL NO. 2002-106
ORDINANCE NO. 5526

AN ORDINANCE TO ADOPT
THE 2000 EDITION OF THE
UNIFORM PLUMBING
CODE, TOGETHER WITH
AMENDMENTS THERETO,
AND TO PROVIDE FOR
OTHER RELATED MAT-
TERS.

Proposed by: Paul K. Wil-
kins, Director of Building
and Safety
Summary: Adopts the
2000 Edition of the Uniform
Plumbing Code, together
with amendments there-
to, as the City's Plumbing
Code.

The above and foregoing
ordinance was first
proposed and read by title to
the City Council on the
2nd day of October, 2002,
and referred to a commit-
tee for recommendation;
thereafter the committee
reported favorably on said
ordinance on the 6th day
of November, 2002, which
was a regular meeting of
said City Council; and that
at said regular meeting
the proposed ordinance
was read by title to the
City Council as amended
and adopted by the fol-
lowing vote:

VOTING "AYE": Mayor
Goodman and Council-
members Reese, M. McD-
onald, L. Brown, Weakly,
and Mack
VOTING "NAY": NONE
EXCUSED: L.B. McDonald

COPIES OF THE COMPLETE
ORDINANCE ARE AVAILA-
BLE FOR PUBLIC INFORMA-
TION IN THE OFFICE OF
THE CITY CLERK, 1ST
FLOOR, 400 STEWART AVE-
NUE, LAS VEGAS, NEVADA.
PUB: November 9, 2002
LV Review-Journal

Signed: _____

Donna Stark

SUBSCRIBED AND SWORN BEFORE ME THIS THE _____

11

day of _____ 2002

November

Notary Public

Mary B. Sheffield

